

NONCOAL
MR Form 3
(Revised 1987)

RECEIVED
JUN 17 1987

DIVISION OF
OIL, GAS & MINING

ANNUAL OPERATIONS AND PROGRESS REPORT

1986

(This report must be submitted to the Division by ~~March 31~~ ^{APRIL 30}, 1987.)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
3 Triad Center, Suite 350
355 West North Temple
Salt Lake City, Utah 84180-1203
(801) 538-5340

OPERATOR: Lone Star Industries MINE NAME: Quarry Anrone
ADDRESS: 615 West 800 South
Salt Lake City, UT 84104
PERMIT NUMBER AND DATE OF PERMIT: m/045/021
REPRESENTATIVE: J. Lake
SECTION(S): NE $\frac{1}{4}$ 18, NW $\frac{1}{4}$ 17 TOWNSHIP(S): 2S RANGE(S): 6W
MINERAL(S) MINED: Shale

Section 40-8-15 and Rule M-8 of the Utah Mined Land Reclamation Act, requires each operator to include with this report an up-dated map and plan prepared in accordance with Rule M-3, as outlined in the requirements for annual report maps in Appendix I, providing a detailed status of all mining and reclamation activities which have occurred during the past year.

The report should include:

MINING:

(a) Tabulation of acreage disturbed (by pits, roads, facilities, etc.) during the report period with illustration on a current map.

<u>Disturbance</u>	<u>Acreage</u>
Pit	<u>1.38</u>
Roads	<u>0.72</u>
Facilities	<u>0</u>
Waste Dumps	<u>0</u>
Other	<u>0.57</u>

(b) Tabulation of acreage affected to date (by years).

<u>Date by Year</u>	<u>Acreage (Total)</u>
1975	--
1976	--
1977	--
1978	--
1979	--
1980	--
1981	--
1982	--
1983	--
1984	--
1985	2.67
1986	2.67

(c) Tabulation of all topsoil (new) stockpile volumes (see chart below) and date of stockpiling.

SOIL TABULATION CHART

Area Affected (in mining sequence) (If more space is needed, please attach.)	Area			
	1	2	3	etc.
<hr/>				
Acreage of Area	2.67			
Depth of Topsoil Removal (inches)	12" APR			
Depth of Topsoil Replacement (inches)*	12"			
Estimate of Topsoil Volume Salvaged (yd ³ or ac ft)	2240 yds ³			
Volume Actually Salvaged (yd ³ or ac ft)	2200 yds ³			
Volume Required for Reclamation (yd ³ or ac ft)	2200 yds ³			
Surplus or Deficit Volume (yd ³ or ac ft)	-0-			
Storage Status (short- or long-term)	long term			
Storage Location	see map			
Area Where Soil Has Been Used (if not stored)	N/A			
Running Total (all stockpiles) (yd ³ or ac ft)	9000 yds ³			
Short-term	7000 yds ³			
Long-term	2200 yds ³			

*Of previously stripped area recently reclaimed.

(d) Tabulation of all (newly removed) out-of-pit spoil volumes, date of placement and illustration on a map.

<u>Area</u>	<u>Date</u>	<u>Acreage</u>
N/A		

(e) Tabulation of quantity of commodity mined.

	<u>Commodity</u>	<u>Tonnage</u>
(Mined)	Shale	
(Milled)	Shale	50,545

(f) Description of any new construction during the report period with illustration on a map, including, but not limited to:

1. Buildings and support facilities.

N/A

2. Roads.

No new construction

3. Diversion ditches, collector ditches, interceptor ditches, etc.

No new construction

4. Culverts.

No new construction

5. Sediment ponds, containment ponds.

N/A

6. Monitoring sites (vegetative, air quality, surface subsidence, surface water or ground water, etc.).

N/A

7. Topsoil stockpiles.

No new topsoil has been removed in this report time period

(g) Description of any environmental problem areas with a proposed plan for mitigation and illustration on a map, including, but not limited to:

1. Pit stability problems.

Highwall sluffing, proper slope must be maintained

2. Subsidence.

None

3. Accidental water discharge, dam failure, etc.

N/A

4. Slumping, sliding or erosion.

Only in pit area during active mining

5. Revegetation problem areas.

Rock ledges created from mining sequence

6. Existence and location of unsuitable (toxic) overburden.

None

RECLAMATION:

(a) Tabulation of the acreage reclaimed during the report period with illustration on a map, distinguishing between:

1. Backfilled, graded and contoured areas.

<u>Area</u>	<u>Acreage</u>
N/A	

2. Topsoiled areas.

<u>Area</u>	<u>Acreage</u>
N/A	

3. Seeded areas.

<u>Area</u>	<u>Acreage</u>
N/A	

4. Reseeded areas (areas previously seeded, then seeded again).

<u>Area</u>	<u>Acreage</u>
N/A	

(b) Tabulation of total acreage reclaimed (seeded with permanent seed mix) to date by years with illustration on an updated map:

<u>Year</u>	<u>Acreage</u>
1975	--
1976	--
1977	--
1978	--
1979	--
1980	--
1981	--
1982	--
1983	--
1984	--
1985	--
1986	-0-

(c) Description of the reclamation procedures used during the report period, including:

1. Average depth of topsoil applied.

N/A

2. Type of seed (species) used for seeding during the report period.

N/A

3. Date of seeding during the report period.

Spring N/A

Fall

4. Seeding procedures used.

(Hand broadcast or drilled or any other).

N/A

5. Rate of seed application.

Pounds Per Acre of Pure Live Seed (PLS) (if varied, please explain)

N/A

6. Type and rate of fertilizer applied.

N/A

7. Type and rate of mulch applied.

N/A

8. Rate of irrigation water applied, if any. Please describe any type of sprinkling, or water applied (water truck, etc.).

N/A

9. Revegetation test plot information.

(Cover, density, productivity, etc.)

N/A

10. Soil analysis results.

N/A

(d) Description of results of previous revegetation efforts, including:
(This should be done as applicable.)

1. Types (species) of seed that have germinated and are growing.

N/A

2. Types (species) of seed that are not growing successfully.
N/A

3. Areas experiencing problems with weeds and weed types.
N/A

4. Significant erosional problems.
N/A

5. Areas of unsuitable overburden on the surface as related to revegetation failure.
N/A

6. Procedures used or proposed to correct these problems.
N/A

7. Acreage and dates of release (upon inspection by the State) of revegetated areas.

<u>Area</u>	<u>Date</u>	<u>Acreage</u>
N/A		

8. Results of soil analysis.
N/A

(e) Summarization of the reclamation costs incurred during the report period, including itemized costs for each operation (i.e., grading, topsoil replacement, seeding, etc.) and for each type of disturbance (i.e., spoil, haul roads, facilities removal, etc.) on a per acre basis.

	<u>Acres</u>	<u>Cost/Acre</u>
1. Grading	_____	_____
2. Backfilling	_____	_____
3. Contouring	_____	_____
4. Topsoil Replacement	_____	_____
5. Seeding	_____	_____
A. Seedbed Preparation	_____	_____
B. Mulch	_____	_____
C. Fertilizer	_____	_____
D. Seed	_____	_____
6. Other	_____	_____

BOND INFORMATION:

- A. An updated bond estimate should be included, if required in the Division's approval of the Mining and Reclamation Plan (MRP) or if changes to the MRP have occurred, including a detailed itemization of actual/estimated reclamation costs as outlined in the RECLAMATION section above. The date of the release of revegetated areas from further responsibility for a partial bond release, if applicable, should also be included.

	<u>Amount</u>	<u>Type</u>	<u>Date Posted</u>
Present Bond	_____	_____	_____
Increased disturbance, if any:	_____	_____	_____

Increased Bond Amount (attached reclamation estimate).

- B. Bond release.

<u>Acres</u>	<u>Bond Amount Released</u>	<u>Date</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

ADDITIONAL INFORMATION:

Supply any additional information as requested by the Division related to:

- (a) Permit stipulations (status).
(b) Other special conditions (status).

APPENDIX I

ANNUAL REPORT MAPS

1. Maps must be clear and legible contour maps or recent aerial photos. The scale should be 1 inch = 500 feet to adequately show topographic features.
2. Map sheets should be of a reasonable size, not to exceed 48 inches on a side.
3. Maps must have a title block with:
 - A. Map title.
 - B. Name and address of permittee.
 - C. Permit and amendment numbers.
 - D. Annual report period.
 - E. Scale, north arrow, contour interval, date of photography, etc.
4. All maps must show:
 - A. Legal subdivisions.
 - B. Permit area boundary clearly shown and labelled.
 - C. Amendment areas clearly shown and labelled.
 - D. Contour features.
5. The following features should all be clearly identified:
 - A. Topsoil stockpiles (numbered and with volumes).
 - B. Settling ponds and sediment control structures.
 - C. Haul roads.
 - D. Pits identified by location, name, number, etc.
 - E. Ramps (numbered).
 - F. Out-of-pit spoil dumps.
 - G. All waste disposal sites including, but not limited to:
 1. Landfill sites.
 2. Carbonaceous waste dumps.
 - H. Diversion ditches.
 - I. Monitoring sites.
6. All areas to be affected by mining and reclamation in the coming year should be outlined and labelled.